

### ABSTRACT

A method of treatment of neurodegenerative diseases using neuronal cell transplants is provided. The growth, survival and integration of the transplanted neuronal cells is enhanced by a method of culturing the neuronal cells with drugs  
5 having an affinity for immunophilins. Immunophilin binding drugs are optionally administered to the patient during transplantation and/or post-operatively. Neurotrophic factors can also be administered to the neuronal cells *in vitro*, or to the patient during the transplantation procedure and/or post-operatively.